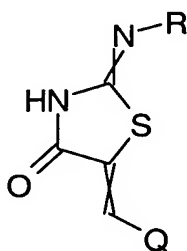


Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

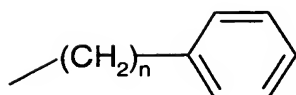
1. (Original) A compound of the formula I, or a salt, solvate, or a physiologically functional derivative thereof



I

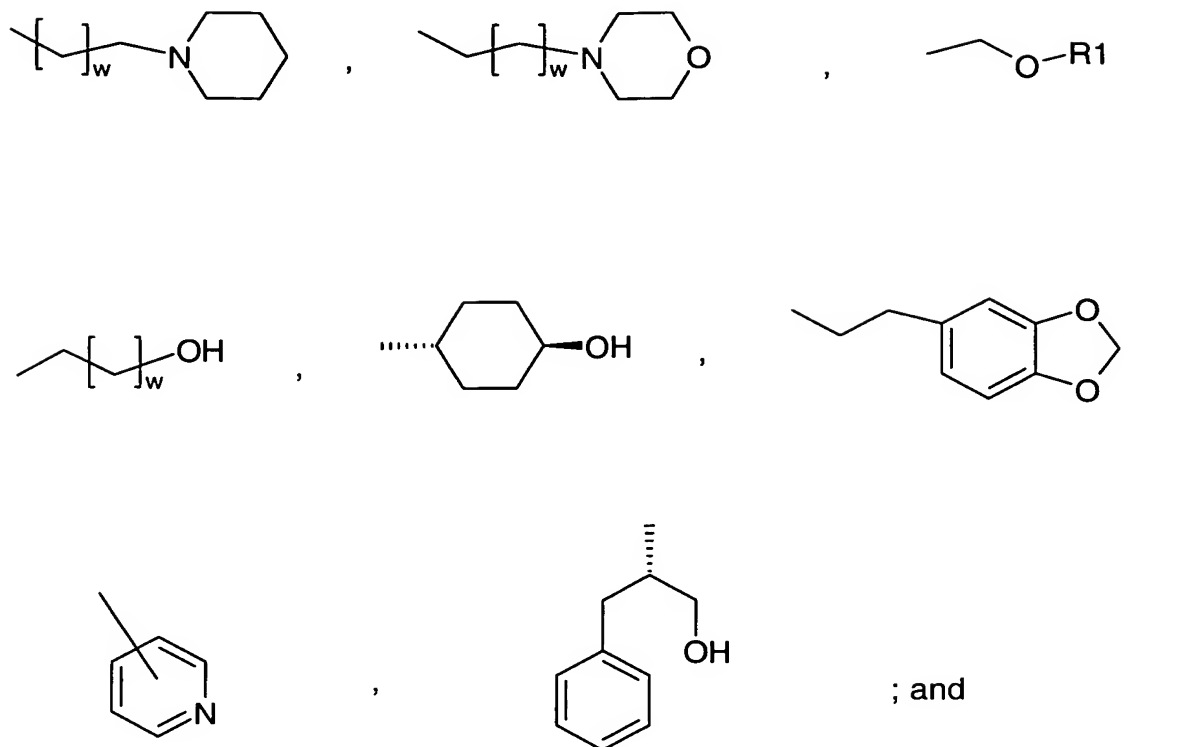
in which

R is

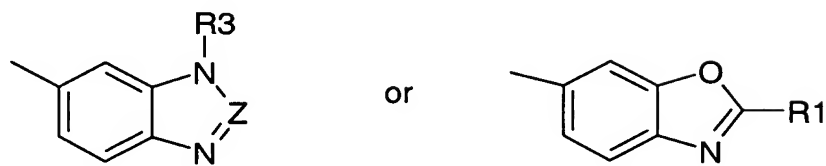


in which the phenyl radical is optionally and independently substituted with up to three halogen, -C₁₋₆alkyl, -OC₁₋₆alkyl, -CF₃, -CN, -CO₂H, -SO₂NH₂, -CONH₂; or

R is a radical of the formula

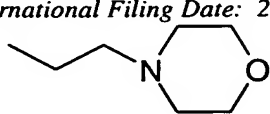


Q is a radical of the formula

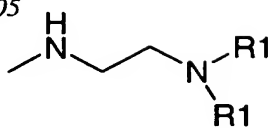


in which Z is N or C-R2;

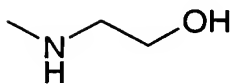
wherein R2 is hydrogen, -NH₂, -C₁₋₆alkyl, -CF₃, or a radical of the formula



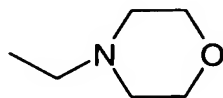
,



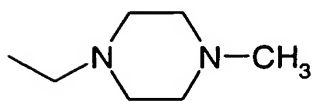
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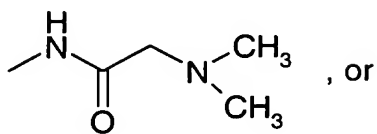
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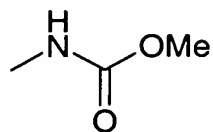
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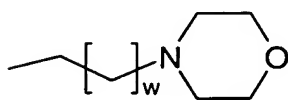


, or

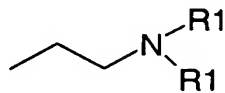


; and

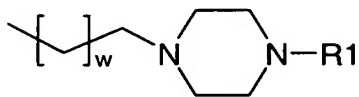
R3 is -C₁₋₆ alkyl, or a radical of the formula



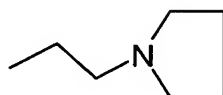
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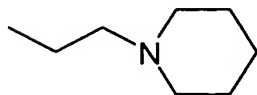
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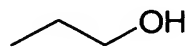
,



,



, or

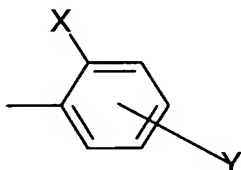


; and

n equals zero to two;
w equals one to two; and
R1 is -C₁₋₆alkyl.

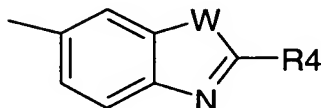
2. (Original) A compound of claim 1 in which R is phenyl optionally and independently substituted with up to three halogen, -C₁₋₆alkyl, -OC₁₋₆alkyl, -CF₃, -CN, -CO₂H, -SO₂NH₂, -CONH₂.

3. (Original) A compound of claim 2 in which R is



in which X is halogen or CF₃; and Y is hydrogen, halogen, -C₁₋₆alkyl, -OC₁₋₆alkyl, -CF₃, -CN, -CO₂H, -SO₂NH₂, -CONH₂.

4. (Original) A compound of claim 3 in which Q is



in which R4 is methyl or hydrogen, and W is O or N-R1, in which R1 is -C₁₋₆alkyl.

5. (Currently Amended) A method of inhibiting hYAK3 in a mammal; comprising, administering to the mammal a therapeutically effective amount of a compound of claim 1, [[2, 3, or 4,]] or a salt, solvate, or a physiologically functional derivative thereof

6. (Currently Amended) A method of treating or preventing diseases of the erythroid and hematopoietic systems, caused by the hYAK3 imbalance or inappropriate activity; comprising, administering to a mammal a therapeutically effective amount of a compound of claim 1, [[2, 3, or 4,]] or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

7. (Original) A method of claim 6 in which diseases of the erythroid and hematopoietic systems are selected from the group consisting of: anemia, aplastic anemia, myelodysplastic syndrome, myelosuppression, and cytopenia.

8. (Currently Amended) A method of treating or preventing diseases selected from the group consisting of: anemia, aplastic anemia, myelodysplastic syndrome, myelosuppression, and cytopenia; comprising, administering to a mammal a therapeutically effective amount of a compound of claim 1, [[2, 3 or 4,]] or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

9. (Currently Amended) A pharmaceutical composition including a therapeutically effective amount of a compound claim 1, [[2, 3, or 4,]] or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

10. (Original) A compound selected from the group consisting of:

(5Z)-2-[(2-Chlorophenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2,6-difluorophenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2,4-dimethylphenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-2-[[2-(methoxy)phenyl]amino]-1,3-thiazol-4(5H)-one;

(5Z)-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-2-[[2-(trifluoromethyl)phenyl]amino]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2,4-difluorophenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2-chloro-4-fluorophenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2-Chlorophenyl)-amino]-5-[(1,2-dimethyl-1H-benzimidazol-6-yl)-methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1,2-dimethyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2,6-difluorophenyl)amino]-5-[(1,2-dimethyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-5-[(1,2-dimethyl-1H-benzimidazol-6-yl)methylidene]-2-[(2,4-dimethylphenyl)amino]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,4-difluorophenyl)amino]-5-[(1,2-dimethyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chloro-4-fluorophenyl)amino]-5-[(1,2-dimethyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-Chlorophenyl)-amino]-5-[(1-[2-(4-morpholinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[2-(4-morpholinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chloro-4-fluorophenyl)amino]-5-[(1-[2-(4-morpholinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[2-(dimethylamino)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[2-(dimethylamino)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,4-difluorophenyl)amino]-5-[(1-[2-(dimethylamino)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-5-[(1-[2-(dimethylamino)ethyl]-1H-benzimidazol-6-yl)methylidene]-2-(phenylamino)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[2-(diethylamino)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[2-(diethylamino)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[3-(4-morpholinyl)propyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[3-(4-morpholinyl)propyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[3-(4-methyl-1-piperazinyl)propyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[3-(4-methyl-1-piperazinyl)propyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[2-(1-pyrrolidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[2-(1-pyrrolidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[2-(1-piperidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[2-(1-piperidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-difluorophenyl)amino]-5-[(1-[2-(1-piperidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2-Chlorophenyl)amino]-5-({1-[2-(dimethylamino)ethyl]-2-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({1-[2-(dimethylamino)ethyl]-2-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,4-difluorophenyl)amino]-5-({1-[2-(dimethylamino)ethyl]-2-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-5-({1-[2-(dimethylamino)ethyl]-2-methyl-1H-benzimidazol-6-yl)methylidene)-2-(phenylamino)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({1-[2-(2-hydroxyethyl)-2-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-({2-methyl-1-[2-(1-piperidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({2-methyl-1-[2-(1-piperidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-difluorophenyl)amino]-5-({2-methyl-1-[2-(1-piperidinyl)ethyl]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-methyl-2-[(2-(4-morpholinyl)ethyl)amino]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-methyl-2-[(2-(4-morpholinyl)ethyl)amino]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,4-difluorophenyl)amino]-5-[(1-methyl-2-[(2-(4-morpholinyl)ethyl)amino]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(2-[(2-(dimethylamino)ethyl)amino]-1-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-({2-[(2-hydroxyethyl)amino]-1-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-({1-methyl-2-(4-morpholinylmethyl)-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({1-methyl-2-(4-morpholinylmethyl)-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-({1-methyl-2-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({1-methyl-2-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-Chlorophenyl)-amino]-5-({1-methyl-2-(trifluoromethyl)-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({1-methyl-2-(trifluoromethyl)-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({1-[2-(dimethylamino)ethyl]-2-(trifluoromethyl)-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-({2-(1,1-dimethylethyl)-1-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-({2-(1,1-dimethylethyl)-1-methyl-1H-benzimidazol-6-yl)methylidene)-1,3-thiazol-4(5H)-one;

(5Z)-2-[(2-Chlorophenyl)amino]-5-[(1-methyl-1H-1,2,3-benzotriazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-methyl-1H-1,2,3-benzotriazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2-chlorophenyl)amino]-5-[(1-[2-(dimethylamino)ethyl]-1H-1,2,3-benzotriazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
(5Z)-2-[(2,6-dichlorophenyl)amino]-5-[(1-[2-(dimethylamino)ethyl]-1H-1,2,3-benzotriazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one;
2-(2,6-Dichloro-phenylimino)-5-(2-methyl-benzooxazol-6-yl-methylene)-thiazolidin-4-one;
2-(2,6-Difluoro-phenylimino)-5-(2-methyl-benzooxazol-6-yl-methylene)-thiazolidin-4-one;
2-(2-Fluoro-phenylimino)-5-(2-methyl-benzooxazol-6-yl-methylene)-thiazolidin-4-one;
2-(2-Chloro-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(2-Trifluoromethyl-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(2,4-Difluoro-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(2,5-Dichloro-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(2,4-Dimethyl-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(4-Cyano-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
4-[5-(2-Methyl-benzooxazol-6-ylmethylene)-4-oxo-thiazolidin-2-ylideneamino]-benzoic acid;
2-(2,4-Dichloro-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(2,5-Difluoro-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
5-(2-Methyl-benzooxazol-6-ylmethylene)-2-phenylimino-thiazolidin-4-one;
5-(2-Methyl-benzooxazol-6-ylmethylene)-2-(2-piperidin-1-yl-ethylimino)-thiazolidin-4-one;
2-(2-Methoxy-ethylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
5-(2-Methyl-benzooxazol-6-ylmethylene)-2-(3-morpholin-4-yl-propylimino)-thiazolidin-4-one;
3-[5-(2-Methyl-benzooxazol-6-ylmethylene)-4-oxo-thiazolidin-2-ylideneamino]-benzenesulfonamide;
2-(4-Hydroxy-butylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(trans-4-Hydroxy-cyclohexylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
5-(2-Methyl-benzooxazol-6-ylmethylene)-2-phenethylimino-thiazolidin-4-one;
4-{2-[5-(2-Methyl-benzooxazol-6-ylmethylene)-4-oxo-thiazolidin-2-ylideneamino]-ethyl}-benzenesulfonamide;

2-(2-Benzo[1,3]dioxol-5-yl-ethylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(4-Chloro-phenylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
5-(2-Methyl-benzooxazol-6-ylmethylene)-2-(pyridin-3-ylimino)-thiazolidin-4-one;
3-[5-(2-Methyl-benzooxazol-6-ylmethylene)-4-oxo-thiazolidin-2-ylideneamino]-benzamide;
2-(2-Hydroxy-ethylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
2-(1-Hydroxymethyl-2-phenyl-ethylimino)-5-(2-methyl-benzooxazol-6-ylmethylene)-thiazolidin-4-one;
N-{6-[2-(2-Bromo-phenylimino)-4-oxo-thiazolidin-5-ylidenemethyl]-1H-benzoimidazol-2-yl}-2-dimethylamino-acetamide; and
Methyl (5-[(Z)-[2-[(2-bromophenyl)amino]-4-oxo-1,3-thiazol-5(4H)-ylidene]methyl]-1H-benzimidazol-2-yl)carbamate.